

Characteristic Egogram Pattern in University Students Using Tokyo University Egogram (TEG)

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Abstract

Recently, the importance of mental health has been emphasized, and clinical practice and research for egogram has been attracted attention. Tokyo University Egogram (TEG) has been a reliable and useful battery for psychological evaluation. Authors and colleagues have continued several reports of TEG so far. Egogram has 5 egos, which are Critical Parent (CP), Nurturing Parent (NP), Adult (A), Free Child (FC) and Adapted Child (AC). Each factor can be calculated by the points from 0 to 20. Subjects were 98 university students and the results were analyzed in comparison with previous standard data of TEG. The results were as follows: i) CP; the average value tended to be slightly lower, but the shape of the distribution was similar, ii) NP; it showed almost the same results as general people, iii) A; average value is similar, but the distribution was different, and no case was found with less than 5 points, iv) FC; average value was higher than general public, and distribution was deviated to high level, v) AC; mean value was higher compared with general people, and distribution was deviated to high level. Several characteristic points were found, which will be worthwhile to psychological development in the future.

Keywords: Tokyo University Egogram (TEG); Information and Communication Technologies (ICT); university students; Critical Parent (CP); Adult (A)

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Introduction

In recent years, the importance of people's mental health has been called out around the world, and it involves social change [1]. In particular, the rapid development of Information and Communication Technologies (ICT) has also had an impact [2]. The influence of the growing environment is also important in the younger generation [3]. Then, in order to continue optimal our health, it is required to take adequate way for our body and mind. From bio-psycho-social points of view, self-affirmation and self-efficacy are crucial matters for psychosomatic medicine, psychology, education, psychiatry and other related regions [4]. These important issues have been related with each personality and one's egogram of each person [5, 6]. Mental health has been practiced in the field of psychology for many years [7].

One of the historically significant developments in that research is transaction analysis (TA). TA was initiated by Eric Berne, who proposed a new method as a personality theory [8]. It had psychological evaluation and treatment for evaluating human adequate communication. It was named by the egogram, which uses 3 human ego status in our mind. The fundamental egogram includes PAC model associated with parent (P), adult (A) and child (C). Successively, John Dusey had developed this theory into

clinical application with five egos [9]. They include CP (Critical Parent), NP (Nurturing Parent), A (Adult), FC (Free Child) and AC (Adapted Child) [9, 10]. The practice of egogram have undergone various developments. Among them, study method of egogram has been implemented in Japan, and research has been conducted by Tokyo University Egogram (TEG) [11].

Authors et al. have continued to study egograms for years, and we have used TEG 2nd edition. The subjects were patients with various diseases, university students and others. We have seminars of TEG associated with the analysis of the subjects [12]. Furthermore, we have also analyzed the data of TEG from several points of view [13]. As to these results, case reports and educational reviews have been published [14]. TEG 2nd edition has been clinically applied for long. As various data have been accumulated in several fields, a new and timely revision has been made and the third edition has been introduced [15]. The characteristic of new version would be the adequate aspect along with the social progress in Japan [16]. We have initiated the lecture of TEG ver 3, and we obtained TEG data from university students. In this report, we describe the results and some consideration for TEG and its categorization.

Subjects and Methods

The subjects enrolled were the freshmen of Tokushima University, school of science and technology, who were admitted in April 2020 and 2021. Authors have taught the general information and practical research of TEG every year. The seminar has been provided in July every year, which is adequate for students because of stable life style condition. The number of the subjects were male 91 and female 8. The method was applying TEG ver 3 to those subjects and analyzing the data [15]. TEG has 5 main egograms, and each factor can be calculated by the points from 0 to 20 [16]. TEG ver 3 has shown the standard data for each egogram, then currently obtained data was compared with the previous standard

data. In actual analysis, the number of subjects was 99 but detail points of 5 ego was obtained from 98.

Results

For the current investigation, the points and also the distribution of five kinds of egos are shown in Figure 1 to 5 in the following.

- CP: The distribution of CP was mountain-shaped with 11 points at the top. Compared with the standard value of TEG ver 3, the average value tended to be slightly lower, but the shape of the distribution was similar (Figure 1).

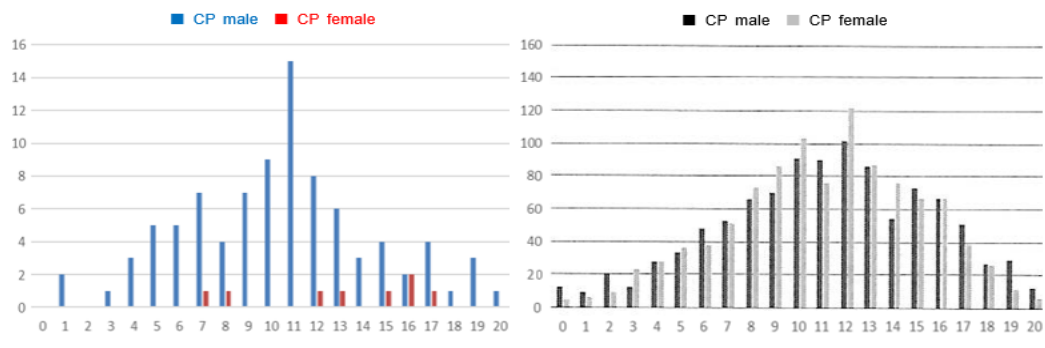


Figure 1: Distribution of Critical Parent (CP) left: current data, right: standard data.

- NP: The factor NP of university students showed almost the same results as that of general people (Figure 2).

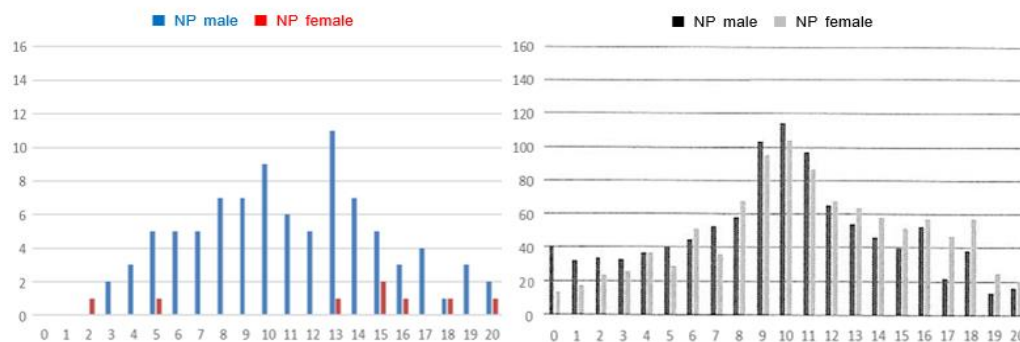


Figure 2: Distribution of Nurturing Parent (NP) left: current data, right: standard data.

- A: Concerning factor A, the average value seems to be similar, but the distribution was different. No case was found with less than 5 points, and less prevalence was observed who has higher A points (18-20 points) (Figure 3). Consequently, mean value is similar but the standard deviation is different.

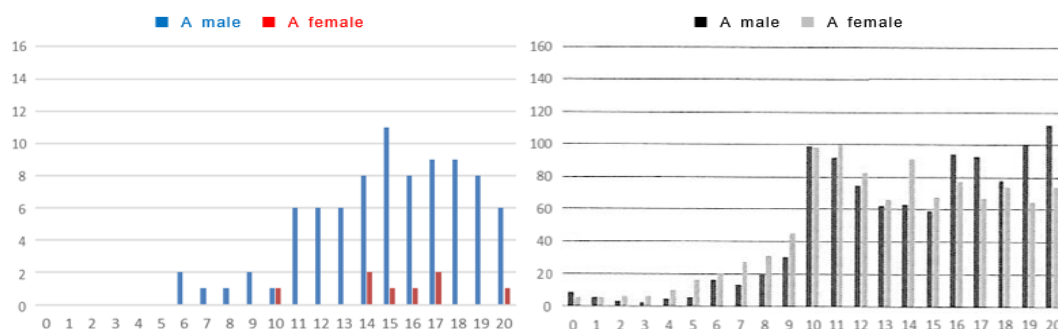


Figure 3: Distribution of Adult (A) left: current data, right: standard data.

- FC: The average value of FC was higher than that of the general public, and the frequency distribution also showed an average frequency at a high level (Figure 4).

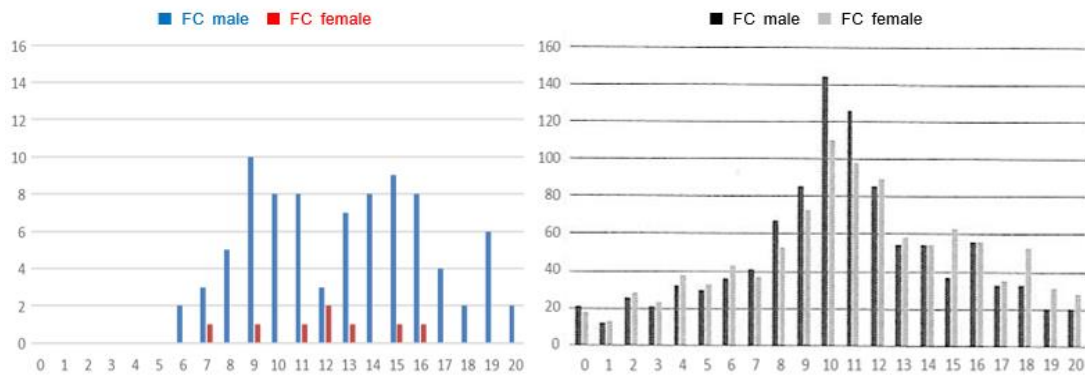


Figure 4: Distribution of Free Child (FC) left: current data, right: standard data.

- AC: AC showed the tendency of higher mean value compared with general people. There was some right sided deviation of the distribution (Figure 5).

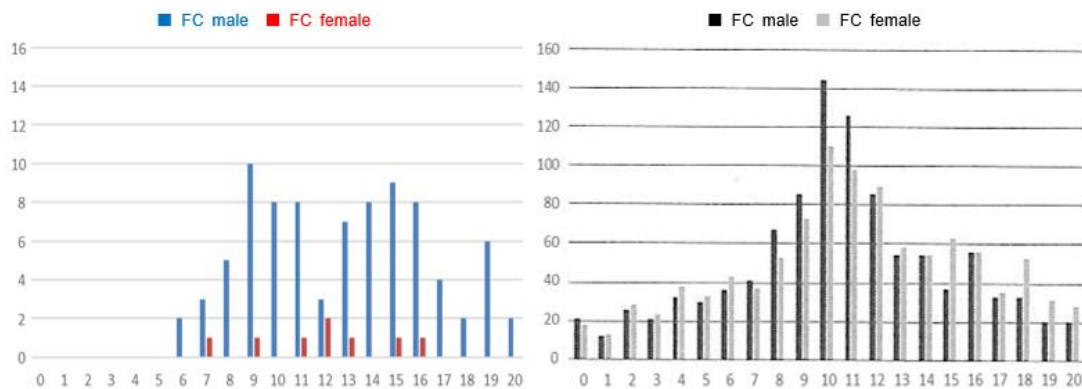


Figure 5: Distribution of Adapted Child (AC) left: current data, right: standard data.

Discussion

TA has been a beneficial method of self-analysis. Through the application and analysis of TEG, it provides us to respond to a variety of stressors in daily life and to control of ourselves [17]. Regarding egogram, general perspectives of five egos can be summarized as follows [9, 10]: i) Critical Parent (CP) means the sense of justice, responsibility, morality, conscience and others. Person with higher CP has a strong sensation of justice and tends to show rather critical attitude to others; ii) Nurturing Parent (NP) means the feeling of the compassion, kindness, acceptability, tolerance, empathy, and so on. Person with higher NP shows favorable personality with warm, caring, kind accepting and protective attitude; iii) Adult (A) indicates the right judgment, reason, intelligence, logic, calmness, reality orientation. Person with higher A is reasonable in behavior, confident and calm, and can control own emotion stable; iv) Free Child (FC) means freedom, creativity, intuition, pleasure, curiosity, expressiveness, and others. A person with higher FC expresses emotions freely, as well as full of vitality and high creative power; v) Adapted Child (AC) means cooperation, perseverance, honesty, politeness, and others. Person with higher AC is estimated to be honor student with

highly cooperative, passive, obedient personality who always strives to meet the expectation [10].

Regarding the results of five kinds of egos, some perspectives from various points of view are described in order from CP to AC [18]. Concerning CP factor, the average value of CP showed a little lower tendency. It is probably due to the social situation that young teenagers rarely take a certain responsibility or an authoritative position in the organization [19]. As for NP, this factor was almost completed and brought up by the education up to high school [20]. In the university, the education to support NP including ethics education is not usual. Then, NP value would not fluctuate so much after university. However, if ethics education would be continued at the university, NP value can be possibly increased. It may be necessary to consider incorporating ethics education at universities as well. The characteristic of a factor has some perspectives. The fact that no case was observed with very low A factor would be compatible to the university students of science and technology department. Factor A means not only the good ability of mathematics or physics, but also logical thinking ability. During 4 years of university education of science and technology containing, the degree of A factor may be elevated which shows the results of higher university education [19]. FC value means several

backgrounds [21]. University students are excited to gain free daily life compared with the previous stressful high school life associated with studying for university entrance examination [22]. There may be equivocal influence of current COVID-19 for the students, whether FC may be decreased or stable. The value of FC will be followed up for years after COVID-19 will be ceased. As to AC, it is considered that the independence concept has been rather poor, and the necessity of cooperation in the campus life has been influenced [23]. The study was held 3 years after the admission, then this value will be presumed to be settle down as students will be accustomed to college lives with some self-confidence in the future.

This report has some limitation. The sample size is not be large, and the number of female subjects were less. Then, statistically significant differences cannot be analyzed. Further, the age of the subjects were almost 18-19 years, then the data would become useful data for certain age period. The prevalence and distribution of each ego will be changed along with the follow up the subjects for years [24, 25].

In summary, TEG ver 3 was applied to university students and the obtained results were compared with the previous standard data. Several characteristic points were found for current investigation, and these data would become fundamental important reference. Follow up of the TEG in the future will be worthwhile to psychological development.

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Conflicts of interest

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References

1. Romm KF, Patterson B, Wysota CN, Wang Y, Berg CJ. Predictors of negative psychosocial and health behavior impact of COVID-19 among young adults. *Health Educ Res*. 2021.
2. Fonseca A, Osma J. Using Information and Communication Technologies (ICT) for Mental Health Prevention and Treatment. *International Journal of Environmental Research and Public Health*. 2021; 18: 461.
3. Fricke J, Bolster M, Ludwig-Korner C. Occurrence and determinants of parental psychosocial stress and mental health disorders in parents and their children in early childhood: rationale, objectives, and design of the population-based SKKIPPI cohort study. *Soc Psychiatry Psychiatr Epidemiol*. 2021; 56: 1103-1112.
4. Saitou T, Sugahara T, Kato C. A Study on the Self-Affirmation of University Student - Focusing on Classification by Personality. 2018 7th International Congress on Advanced Applied Informatics (IIAI-AAI). 2018.
5. Yoshiwara K, Tsuchiya H. Correlations among focusing attitudes, psychological competitive abilities and public self-consciousness in

- college athletes. *Person-Centered and Experiential Psychotherapies*. 2019; 18: 85-97.
6. Karumur RP, Nguyen TT, Konstan JA. Personality, User Preferences and Behavior in Recommender systems. *Information Systems Frontiers*. Springer Science+Business Media, LLC 2017; 1-25.
7. Graiver IA. Historical perspective on mental health: Proposal for a dialogue between history and psychology. *History of Psychology*. 2021; 24: 1-12.
8. Berne E. Transactional analysis. Ballantine Books. ISBN 0345271408. 1978.
9. Dusay J. Egograms. How I see you and you see me. Harper and Row, New York. 1977.
10. Berne E. Transactional Analysis in Psychotherapy: A Systematic Individual and Social Psychiatry. Martino Fine Books. ISBN 161427844X. 2015.
11. Psychosomatic medicine department of Tokyo University. Egogram pattern new edition. Personality analysis. Kaneko publishing, Tokyo. 1995.
12. Yokoyama T, Bando H. Characteristic egogram state of younger generation. *Edelweiss Psych Open Access*. 2019; 3: 25-28.
13. Bando H, Yokoyama T. Use of Egogram for Psychological Development of the Adolescence. *Psychol Behav Sci Int J*. 2018; 9: 555770.
14. Yokoyama T, Bando H. The Egogram Feature of Late Teenager in the Internet Generation. *Clin Res Psychol*. 2018; 1: 1-4.
15. TEG research group of Tokyo University. New edition of TEG 3. Kaneko Publishing Company, Tokyo. Japan. 2020.
16. Tokyo University Egogram.
17. Steiner CM. Scripts People Live: Transactional Analysis of Life Scripts. Grove Pr. ISBN 0802132103. 1990.
18. Kuboki T, Nomura S, Wada M, Akabayashi A, Nagataki M. Multidimensional assessment of mental state in occupational health care--combined application of three questionnaires: Tokyo University Egogram (TEG), Time Structuring Scale (TSS), and Profile of Mood States (POMS). *Environ Res*. 1993; 61: 285-298.
19. Bando H, Yokoyama T. Psychological change in egogram for university student for years. *Asp Biomed Clin Case Rep*. 2019; 2: 48-51.
20. Yokoyama T, Bando H. Study of Personality Traits for University Students by Egogram Analysis. *Biomed J Sci and Tech Res*. 2018; 9.
21. Park B, Ibayashi K, Matsushita M. Classifying Personalities of Comic Characters Based on Egograms. *International Symposium on Affective Science and Engineering 2018; ISASE 2018 (0)*: 1-6.
22. Kuramoto N, Koizumi R. Current issues in large-scale educational assessment in Japan: focus on national assessment of academic ability and university entrance examinations. *Assessment in Education: Principles, Policy and Practice*. 2016; 25: 415-433.
23. O'Connor DB, Thayer JF, Vedhara K. Stress and Health: A Review of Psychobiological Processes. *Annu Rev Psychol*. 2021; 72: 663-688.
24. Sakagami Y. Qualitative job stress and ego aptitude in male scientific researchers. *Work*. 2016; 55: 585-592.
25. Li Q, Yan J, Liao J, Zhang X, Liu L, Fu X. Distinct Effects of Social Stress on Working Memory in Obsessive-Compulsive Disorder. *Neurosci Bull*. 2021; 37: 81-93.